

Science Gr2 – Lesson 1 - Structures

Curriculum: Science; Applied Design Skills and Technology

Learning Goals:

- Design, test and rebuild a structure
- Problem-solving and perseverance are qualities in scientists and engineers

Materials:

- What Makes Bridges So Strong? <https://www.youtube.com/watch?v=oVOnRPefcno>
- Art supplies (crayons, pencil, scissors)
- Craft materials (eg. tubes, boxes, paper, straws, tape, glue ...)

Activity:

Watch the video on bridges. In Vancouver we have a lot of bridges. Some go over land and some go over water. Some are for people, some are for cars and some are for trains.

What do engineers need to know about materials? What shapes are strong for building?

How can you use the information on shapes for your build?

Make Something:

Put your creative engineering skills to work.

Create a bridge that will hold the weight of something in the middle. The bridge can be any size and any type. Test your bridge when you are finished building. In science this is called testing. In Applied Design it is called testing too.

Change and edit your plans as you go so you build the best bridge possible.

Take a picture of the result.

Extension:

Record a video of your bridge and how you built it and re-designed it.